

Product datasheet for RC220837

ICAD (DFFA) (NM_213566) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	ICAD (DFFA) (NM_213566) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	ICAD
Synonyms:	DFF-45; DFF1; ICAD
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC220837 representing NM_213566 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGAGGTGACCGGGGACCGGGGTACCAGAATCTGGCGAGATCCGGACTCTAAAGCCGTGTCTGCTGC
GCCGCAACTACAGCCGCGAACAGCACGGCGTGGCCGCCTCCTGCCTCGAAGACCTGAGGAGCAAGGCCTG
TGACATTCTGGCCATTGATAAGTCCCTGACACCAGTCACCCTGGTCTGGCAGAGGATGGCACCATAGTG
GATGATGACGATTACTTTCTGTGTCTACCTTCCAATACTAAGTTTGTGGCATTGGCTAGTAATGAGAAAT
GGGCATACAACAATTCAGATGGAGGTACAGCTTGATTTCCCAAGAGTCTTTGATGTAGATGAAACAGA
CAGCGGGGACAGGTTGAAGTGAAGAATGTGGCCAGGCAGCTGAAAGAAGATCTGTCCAGCATCATCCTC
CTATCAGAGGAGGACCTCCAGATGCTTGTGACGCTCCCTGCTCAGACCTGGCTCAGGAACCTACGTGAGA
GTTGTGCCACCGTCCAGCGGCTGCAGCACACTCCAACAGGTGCTTGACCAAAGAGAGGAAGTGCGTCA
GTCCAAGCAGCTCCTGCAGCTGTACCTCCAGGCTTTGGAGAAAGAGGGCAGCCTCTTGTCAAAGCAGGAA
GAGTCAAAGCTGCCTTTGGTGAGGAGGTGGATGCAGTAGACACGGGTATCAGCAGAGAGACCTCCTCGG
ACGTTGCGCTGGCGAGCCACATCCTTACTGCACTGAGGGAGAAGCAGGCTCCAGAGCTGAGCTTATCTAG
TCAGGATTTGGAGGTGGCGGAAACCAGGGTCAC

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA



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Protein Sequence: >RC220837 representing NM_213566
Red=Cloning site Green=Tags(s)

MEVTGDAGVPESGEIRTLKPCLLRNYSREQHVAASCLEDLRSKACDILAIKSLTPVTLVLAEDGTIV
 DDDYFLCLPSNTKFVALASNEKWAYNNSDGGTAWISQESFDVDETD SGAGLKWKNVARQLKEDLSSIIL
 LSEEDLQMLVDAPCSDLAQELRQSCATVQRLQHTLQQVLDQREEVRSKQLLQLYLQALEKESLLSKQE
 ESKAAFGEVDAVDTGISRETSSDVALASHILTALREKQAPELSLSSQDLEVGGNQGH

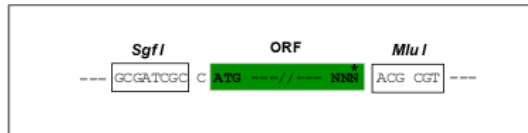
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk8048_b11.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



* The last codon before the Stop codon of the ORF

ACCN: NM_213566

ORF Size: 804 bp

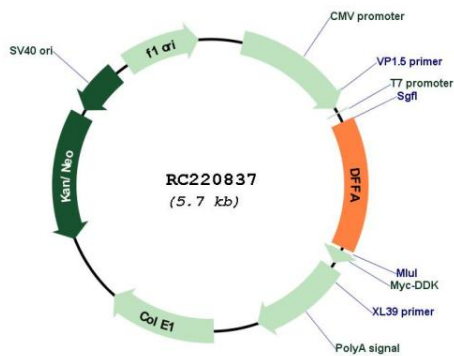
OTI Disclaimer: The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in agreement with the reference, but a complete review of all prevailing variants is recommended prior to use. [More info](#)

OTI Annotation: This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.

Components: The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

Reconstitution Method:	<ol style="list-style-type: none">1. Centrifuge at 5,000xg for 5min.2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.3. Close the tube and incubate for 10 minutes at room temperature.4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.5. Store the suspended plasmid at -20°C. The DNA is stable for at least one year from date of shipping when stored at -20°C.
RefSeq:	NM_213566.2
RefSeq Size:	3408 bp
RefSeq ORF:	807 bp
Locus ID:	1676
UniProt ID:	O00273
Cytogenetics:	1p36.22
Protein Pathways:	Apoptosis
MW:	29.2 kDa
Gene Summary:	<p>Apoptosis is a cell death process that removes toxic and/or useless cells during mammalian development. The apoptotic process is accompanied by shrinkage and fragmentation of the cells and nuclei and degradation of the chromosomal DNA into nucleosomal units. DNA fragmentation factor (DFF) is a heterodimeric protein of 40-kD (DFFB) and 45-kD (DFFA) subunits. DFFA is the substrate for caspase-3 and triggers DNA fragmentation during apoptosis. DFF becomes activated when DFFA is cleaved by caspase-3. The cleaved fragments of DFFA dissociate from DFFB, the active component of DFF. DFFB has been found to trigger both DNA fragmentation and chromatin condensation during apoptosis. Two alternatively spliced transcript variants encoding distinct isoforms have been found for this gene. [provided by RefSeq, Jul 2008]</p>

Product images:



Circular map for RC220837